WHIRRAKEE

March 2000 Vol. 21 No. 2

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MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.

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Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $30; Family $35; Concession: Single $25; Family $30. *Whirrakee* subscription only is $30.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. Meetings start at 7:30pm and conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 7:30pm. Members of the Committee are the Office Bearers listed above, together with the following members: J. Cleary, D Collier; W N Holsworth; M Lewis; K Lottkowitz; R Moors; S Pelczinski; M Stone.

Excursions The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Full-day excursions normally commence at 10am (usually on a Sunday); half-day excursions normally commence at 2pm and may be either on a Saturday or Sunday. Full-day or half-day excursions are usually held on the weekend following the General Meeting. Campouts are held several times each year, usually coinciding with long weekends or holiday periods.

The Bendigo Field Naturalists Club has 2 active sub-groups:

Bird Observers Group: meets on the first Friday of the month, at 7:30pm. The venue for meetings is the Golden Square Senior Citizens Building.

President: Anne Bridley
Secretary: Jane Cleary

Mammal Study Group: meets on the fourth Wednesday of the month at 7:30pm in the Golden Square Senior Citizens Building.

Chairman: John Guley, 39 Cootamundra Place, Junortoun (5449 3479)
Secretary: Bill Holsworth, 13 Nabilla Crs., Bendigo (5443 4063)
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Front Cover: Photographer: Ian Flecknoe-Brown

This kangaroo mother and young were grooming each other (or tickling each other or arguing with each other?) at Lake Mungo National Park in September last year. The number of kangaroos has increased there in the last few years since the introduction of the calicivirus. If you are interested in that topic, Brian Coman will speak about rabbits and may be about this and other effects of the calicivirus at this month's general meeting. Don't miss it.

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club
Vol. 21, No. 2, March 2000

Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*) which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles.
Contributions will be included as soon as possible after they are received, although articles received more than one week after the monthly General Meeting will probably be too late for inclusion in the next issue of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editors' Note
The first meeting of the year was a marathon one and very enjoyable indeed. There was so much to report and there was still outstanding business! One of the reasons for the length was the ambitious plan to present three projects of club members. A lot of interest was shown in each of these, and question time had to be cut short. Presenting these projects was an excellent idea, and it is well worth repeating. It was very interesting to hear what has been done in this region, how it was done and what the outcomes were. The talks are summarised on page 4.

"Wobbly" – the Handsome Black-footed or Swamp Wallaby
Author: Barbara Chmielewska

I met Wobbly when he was orphaned on Bennetts Road. His mother was killed by a car and he was taken to a shelter ran by my friend. I was privileged to watch him grow and even feed him when I visited my friend. Wobbly grew fast—more and more frequently he left the pouch and wobbled around the room. That is why he was named Wobbly. He learned that milk comes from the fridge, so when he was hungry he scratched at the fridge and looked at my friend or tugged at her leg as if to say "come quickly, I am hungry". I could not believe how intelligent he was—he had worked out who is who in the yard and chased and boxed all the other animals, some much bigger than himself. He even danced with the broom. When he thought that there was danger, he ran to my friend for cover or found places to hide.

When he had grown enough and had become accustomed to bush foods, he came to our place. At the time it was raining and I felt so sorry for the poor little Wobbly standing outside our window looking in as if to say, "You are o.k., you are sitting in a warm room, and I am here outside, facing the weather". I was very worried that he would not survive and felt a great relief when I saw him the next morning.

Months passed and Wobbly was accepted by a female wallaby and followed her around. He was still much smaller than the other males. I assume that she accepted him as her joey, which was very fortunate for him. He grew taller and more handsome and stopped coming to me but stood at a distance accepting an apple. I noticed that he had learned to recognise some of the sounds birds make, responding differently to their danger calls when there was a dog or a fox in the area and their normal chatter, squabbles and other danger calls indicating the presence of snakes, lizards and birds of prey. He also navigated successfully an area of approximately 5 km radius during the day and night. When walking, I met Wobbly at different places and my neighbours told me when they spotted him. Although we live in a covenanted area where there are no fences, dogs or cats, he navigated through a greater area which required a knowledge of holes in fences and houses which have dogs.

Time came when Wobbly had to fight another male who became interested in the female which had accepted him. I felt so sorry for Wobbly because it looked to me that he lost. He disappeared for a long time and I was full of joy when I saw him again. I have noticed that part of his ear was missing and that he had a few scars on his body.

The saddest of all incidents was when his companion was killed by a car in Bennetts Road and it looked to me that Wobbly was all alone. By this time he was as big as other wallabies and it was obvious that he could take care of himself. How do I know it was her killed on the road? Because it is remarkable how different individual animals look when we know and observe them almost every day. They all have distinctive markings on their tails and around their ears as well as scars on their body. Their coats are also lighter or darker in colour and some have a lot of ginger around their ears. It is also remarkable how deeply we feel the loss of an animal we know.

Four years have now passed since Wobbly was released. His face is getting grey, but each time I see him I experience a great joy.

I feel very happy that I have known a wild animal so intimately and had the opportunity to be his friend. I am amazed how clever he is. He can recognise us and other neighbours but runs away from any strangers. He also knows our car but runs when a stranger comes to visit. It will be sad when in a few years Wobbly will become an old man wallaby and disappears as have other wallabies in our area.

February General Meeting – Presentation of three projects involving members of the Bendigo Field Naturalists Club
Author: Sabine Wilkens

Koori Garden at Elmore/Campaspe Run

In 1999, Jane Cleary, Matthew Comer, Jan and Rod Orr and others embarked on a plan to establish a Koori garden at Campaspe Run/Elmore in cooperation with the local aboriginal community. After obtaining funding for landscaping and plants, they established 25 species of local indigenous plants on a derelict site with compacted, degraded, weed-infested soil near the railway line.
Altogether, 200 plants were put in on a site half the size of our club room! What all these plants had in common was their use by the Koori community directly or indirectly for food, fibre or perhaps simply enjoyment.

The plants went in late last year and, due to good care and some shelter from the main building at Campaspe Run, they are flourishing. Weed control is part of the maintenance of the site and done occasionally by members of the team as they pass through the area or during special trips to the site. The main weed is Caltrop (Bindii) which grows thickly on the railway line and continuously threatens to invade.

With time, all plants will be numbered and a catalogue produced stating how each plant was used by the aboriginal community. In addition, interpretative information will be placed inside the main building which has glass doors facing the garden.

A broad view was taken as to their past usefulness to the aboriginal community. Rod Orr invited members to comment on their views as to the appropriateness of individual species. The list of plants is given here. Please contact Rod if you think some plants should be removed from the garden or further plants should be added.

In this context, please note that Dr Beth Gott from Monash University will be speaking at the general meeting in April. The talk is entitled "Aboriginal Plant Use and Land Management" and everybody interested in this topic is encouraged to attend.Visitors are most welcome!

List of Koori Food Plants

Acacia acinacea	Gold-dust Wattle (10)
Acacia implexa	Lightwood (5)
Acacia montana	Mallee Wattle (10)
Acacia oswaldii	Umbrella Wattle (1)
Acacia pycnantha	Golden Wattle (15)
Arthropodium strictum	Chocolate Lily (10)
Astroloma humifusum	Cranberry Heath (2)
Billardiera cymosa	Apple Berry (5)
Burchardia umbellata	Milkmaids (10)
Carpobrotus modestus	Inland Pigface (5)
Clematis microphylla	Clematis (5)
Convolvulus erubescens	Blushing Bindweed (7)
Dianella revoluta	Black-anther Flax-lily (2)
Kennedia prostrata	Running Postman (5)
Linum marginale	Native Flax (5)
Melaleuca decussata	Totem Poles (2)
Melaleuca uncinata	Broom Honey-myrtle (2)
Pittosporum phylliraeoides	Weeping Pittosporum (1)
Poa morrisii	Native Tussock (50)
Solanum laciniatum	Kangaroo Apple (1)
Solanum simile	Oondoroo (2)
Themeda triandra	Kangaroo Grass (10)
Lavateria plebeia	Native Hollyhook (2)
Microseris lanceolata	Yam Daisy (15)
Podolepis jaceoides	Showy Podolepis (10)

Nesting Boxes in the Spring Gully and Diamond Hill Area

When Maurie Lewis retired from racing pigeons many years ago, he developed a new hobby: building and placing nest boxes in the bushland around the south of Bendigo.
Up to now, he has placed around 330 nest boxes in the Spring Gully and Diamond Hill areas and due to their excellent camouflage, their rate of destruction by vandals is low. Experience has shown that boxes are occupied almost as soon as they are put up. The occupants, who obviously do not have any trouble locating the boxes, include rosellas, galahs, bats, sugar gliders, ringtail possums, tuans and white-throated treecreepers.
There are very few natural hollows in the existing trees mainly because of their young age. It is intriguing to speculate where these animals come from that occupy the boxes straight after their installation.
Since this area has been nearly saturated with boxes, the tuan, an uncommon animal in Bendigo has been found nesting right up the to Golden Square area.

Flame Robins on the Windy Hills of Sedgwick

To share the beauty of these little birds and spark our interest, Glenise Moors and Jan Orr presented a series of superb slides (care of Rob and Cynthia Watkins) which showed the characteristics of the male and female as they were sitting at the nest feeding their young.
The Flame Robin project came about in the following way:

Glenise has been banding Flame Robins for a number of years at Epsom, Big Hill, Sedgwick and South Mandurang to see if they moved between these sites. After three years she had concluded that there was very little movement, a result that was complicated by the birds being very obviously trap-shy.
In 1996 Glenise trapped 54 robins, a big increase compared to previous years and this led her to believe that these birds might move through these sites after all.

In 1999 she applied and got a permit to colourband Flame Robins in the Sedgwick area. Colour bands allow the recognition of previously trapped birds and thus avoid the problem of trap-shyness.
The objectives of the study were three-fold:
1. To find out the size of a group of Flame Robins in a winter feeding site at Sedgwick.
2. To find out if individual birds remained at the site throughout the winter.
3. To establish the occurrence of individual birds in feeding waves and the frequency of these waves in the course of a day.

During the winter of 1999, Jan and Glenise did not spend much time at home around the fireplace but were sitting on the windy hills of Sedgwick where they trapped and observed Flame Robins. Between May 27 and September 3, 46 days were spent in the field and they managed a total of 1472 trap hours (total hours individual traps are open)
Mealworms are used in these traps and both (traps and worms) were convincingly demonstrated during their presentation.
Unfortunately (or fortunately!) the winter was mild and dry and there were many insects around. As a result the Flame Robins did not exactly flock to the traps. Overall 64 robins were trapped (of which 4 were re-traps) and birds were continuously surveyed with binoculars for colour bands.
The additional use of a spotting scope half-way through the project made recognition of colourbanded birds easier.

The results were as follows (with reference to the objectives stated earlier):
1. there were around 22 birds in a feeding group.
2. Some birds were seen throughout the winter. The birds, who were obviously trap-shy, became easier to trap by mid-August. Perhaps this means that new birds arrived at this time.
3. Several feeding waves were observed in a day. Several individuals have been observed in consecutive feeding waves .

Bird-Atlassing Outings in the Bendigo Area: March – December 2000

Outings are on the first Sunday of each month. Most outings will be half day, but bringing some morning tea/lunch would be advisable. Meet at the Senior Citizens Centre, Old High Street Golden Square at 9am unless otherwise advised.
Please contact Anne Bridley (ph. 54 494379) or Bev Culvenor (ph. 54 421983) if attending.

March 5 – new tree plantings on the Big Hill Range. We will have the chance to participate in monitoring the effects of ongoing revegetation on birds. Some plantations on the Big Hill Range are now 10 years old.

April 2– Elvyne Hogan's property at Shelbourne.

May 7– Crosbie State Forest.

June 4– Myers Creek between Sebastian and Raywood.

July 2– Huntley area - Wellsford State Forest.

August 6– Sedgwick State Forest/Swift Parrot Survey.

September 3– Bullock Creek/East Loddon Area

October 1– Loddon River/Serpentine Area.

November (date to be confirmed)– Tang Tang Wildlife Reserve.

December 3– Marong State Forest.

Tree Planting, Wildlife and Nectar

Author: Jenny Wilson
School of Ecology and Environment, Deakin University

Field Naturalist Clubs have a key role to play in encouraging local landholders and government agencies to plant indigenous species for the benefit of wildlife. We are all aware of the impacts that habitat loss has had on our unique fauna. A diversity of species of trees, shrubs and ground covers, that are indigenous to an area, is likely to be best for maintaining biodiversity, but there may be some species which require special consideration because they provide food resources for animals which we consider to be important.

Many scientists and field naturalists are concerned about the decline of our woodland birds, including threatened species, such as the Swift Parrot and Regent Honeyeater, but also those not yet on the endangered list but which are in obvious decline. A distinctive feature of many of these species is that they use nectar as a food resource. Around Bendigo, eucalypts are often the major source of nectar for a variety of birds, including; Yellow -tufted Honeyeaters, Swift Parrots and Black-chinned Honeyeaters. Many of these birds are migratory or nomadic, following flowering events of eucalypts. Despite the importance of eucalypts as a nectar source, and their dominance in the Australian environment, very little is known about the flowering patterns (duration, season, intensity, frequency and proportions of trees flowering) of this genus. Knowledge of flowering patterns can tell us much about the distribution of nectar.

I have been studying the flowering patterns of seven species of eucalypts within Rushworth Forest for my PhD thesis, sampling around 100 marked individuals for each species. Surveys of the flowering status of Red ironbark *Eucalyptus tricarpa* across the box and ironbark region, using random transects, was also part of the study. I have found that the many species of eucalypts within this community provide a year-round nectar resource, with River Red Gum *E. camaldulensis* and Yellow Box *E. melliodora* flowering during summer, Grey box *E. microcarpa* in Autumn, Yellow Gum *E. leucoxylon* and Red Ironbark *E. tricarpa* flowering during winter and Red Box *E. polyanthemos* flowering in Spring. However, flowering is also very patchy, with not all trees flowering in a season and large areas of forest perhaps not flowering at all in any one year. Some forest stands may have heavy flowering while others have light flowering, and this can also vary between years. Large trees have been found to be particularly important in providing nectar resources because they generally flower for a longer duration, more intensely and more frequently than smaller trees.

In particular, Yellow Gums *E. leucoxylon* and Red Ironbark *E. tricarpa* are important in providing nectar because they flower during winter when there are few other species of eucalypts flowering elsewhere in Victoria, and other foods, such as insects, are less abundant. It is at this time that there is a major influx of nectar-feeding birds into the region, suggesting that these species are particularly important in providing nectar for these birds. A study of the nectar quantities and sugar contents of six species of eucalypts also showed that Yellow Gums and Ironbarks provide relatively large quantities of nectar, and the sugar content of the nectar for these species is generally within the range that is preferred by birds, at around 20 - 30% g/100g. Yellow Gums and Red ironbark also have pendulous flowers that are significantly larger than the other species, possibly providing easier access to nectar by birds while deterring insect nectar-feeders. Birds are better pollinators than insects because they can carry the pollen over larger distances and unlike insects their activity is not dependent upon the vagaries of the weather.

The results from this study suggest that all trees, especially large trees are likely to be important in providing nectar resources for a diverse range of animals. Results also suggest that we cannot rely upon the remaining large forest blocks to provide all the nectar resources needed for the mobile bird species and all remnant patches are extremely important. The importance of Yellow Gums and Ironbarks for our nomadic and migratory birds, sugar gliders, squirrel gliders, *et al*. suggest that more consideration could be

given to selecting these species for regeneration activities. Strategic plantings of Ironbarks and Yellow Gums across the landscape, in areas where they naturally occur, will help to increase the resources available over a wider area. The way we plant these trees may also be of benefit. For example, planting trees in clumps is more likely to attract birds and birds would spend less energy moving between trees than if trees were scattered.

The effective conservation of nectar-feeding species requires management and protection of a wide range of habitats across a wide geographic area. Consideration of the species we choose for restoration, and how we plant them across the landscape, is also important for the future distribution of nectar resources.

News from the Garden
Author: Barbara Chmielewska

The first working Bee for Stage 4 will be on **Sunday, 21 May, 2000, starting at 9am.**

It is now 5 years since the Field Naturalists Club and the Bendigo Native Plant Group started to establish our indigenous garden. So far we have completed 3 stages and won an award.

This year we have received a further grant for stage 4, which is a large area and will require a lot of work. We therefore plan to have working bees in May and June to prepare and mulch the ground and in July and August to plant. Provided the weather will be good we should be able to complete stage 4 this year.

The working bees will be advertised in the *Whirrakee* and during the meetings, so please look for the dates and come and help if you can. The work is very rewarding and we have rather pleasant morning teas. In the past we had quite a lot of members at each working bee and it was a lot of work and fun.

We will also require a lot of newspaper for mulching, so please start collecting.

A Burning Issue: Woodland Protection and Firewood
A two-day conference at LaTrobe University, Bendigo, June 8 and 9.

Advance Notice! The Woodlands Department of the Victorian National Parks Association is keen to bring to your attention a conference which they are organising (with an increasing number of local organisations) on the burning issue of:

WOODLAND PROTECTION AND FIREWOOD.
KEEPING BOTH.

National Conference
La Trobe University, Bendigo, June 8 and 9

This conference is for environmentalists and community organisations, professional and hobby farmers, agroforestry experts, the industrial firewood and home heating industries, governments, catchment management authorities and environment professionals....and YOU!

As you would know, up to 1.5 million tonnes of firewood is consumed each year and most of this comes from our endangered woodlands: the quintessential Australian forest and the honey pot for our wintering birds. Our woodlands can't survive this treatment; we've already lost 85% of the Box Ironbark.

There is a solution. It's already underway, but needs to happen much faster: grow the firewood on already cleared farmland. It gives the farmer a cash crop, reduces salinity and soil loss, and can provide healthy habitat if done well.

The conference will foster discussion around these problems, and the solutions, including the VNPA's Firewood Business Plan and practical examples of plantation firewood from NSW, Victoria, and the ACT. An afternoon field trip and conference dinner are included.

Further information will be available in March. If you can volunteer some time, have some ideas, suggest some places to advertise or just want to register interest contact Karen Alexander (tel/fax 03 59684651 or Jason Doyle (VNPA, tel 03 96508296, fax 96546843).
There will be a cost but good concessions will be available for voluntary community organisations.

From the Mailbag
Author: Elaine Mathison

Each month the club receives a number of newsletters and magazines: some by subscription and some in exchange for Whirrakee. These are available from the club library.

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THE VICTORIAN NATURALIST(FNCV)
Volume 116(6) December 1999

"Home Range of the Heath Mouse ..." by E.P. Meulman & N.I. Klomp reports on a study of this species in the Grampians National Park. The home ranges of Heath Mice in three different areas were determined by radio-tracking and trapping.

"Germination & Sowing Depth of Wallaby Grass" by C. O'Dwyer outlines the importance of information about the germination requirements of a particular plant to be used in habitat restoration. Seed for the project was collected from Mt. Piper near Broadford.

"Barbed Wire Fencing as a Hazard for Wildlife" by Rodney van der Ree details records collected from a wide range of people across Australia. At least 62 species of wildlife were reported entangled, mostly in standard farm fencing. Particular attention was paid to the Euroa study area where the writer was involved in another project.

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THE BIRD OBSERVER(BOCA)
February 2000

- Adaptable Parrots: unusual nest sites
- Tropical Observations: Rajah Shelducks, Pied Imperial-Pigeons, Drongo Diet
- Birdwatching at Gipsy Point & Mallacoota: good bird areas & the species to be seen there
- Mystery Mark: on the Sacred Kingfisher
- Pink-eared Ducks: bizarre behaviour at the Western Treatment Plant at Werribee

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Also received recently:

*Castlemaine Naturalist(CFNC)
February 2000

- An excursion to Carlisle State Park, south of Colac

*Geelong Naturalist(GFNC)
February 2000

- An Ant from Inverleigh Common
- First GFNC excursions (1880)

*Newsletter (Ballarat FNC)
February 2000

- Six million years of volcanoes in the Ballarat area

*Sun-Nat (Sunraysia FNC)
January & February 2000

*Field Nats News(VFNC)
February 2000

- Fauna Survey at Mt Mckay
- Geology on the Trawool Plateau

*Canopy(Parks Victoria)

- Terrick Terrick National Park: nurturing a delicate landscape

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Some Facts about Spiders and Assumptions we have drawn
Author: Tom Patullo

Spiders are our close neighbours on this planet, abhorred by many, but by others treated as interesting subjects for study.
The facts are what we see and observe and are therefore true, while assumptions are conclusions we draw from these observations. Some assumptions are logical while others are fanciful and must be treated as such.
Take for instance the little chap who we have watched weaving his web in the evening to catch the night-flying insects, then after making his meal, takes in his web in the morning. We assume that he eats the silk to recycle it during the day so that he can use it to weave his catching web to hang it out next evening, to take the next night's haul. Now what is true and what is assumption in this little story? We see him hanging out his web in the evening, "true" and that it is gone in the morning, except for the base line that he hung his web on in the evening. True. We see him hang it out again in the evening, True, the rest is assumption.

Is it true or fanciful?
Then we can take the case of the spiders who do not weave webs to catch their meal. Such is the case of the Deaths Head Spider, who, secure in her camouflage, as a piece of bird dropping or a tiny skull, (thus the name) will at night hide motionless in her hide while night-flying moths will make several fly passes then fly straight into her waiting arms. The above is true, I have watched by torchlight. Now comes the assumption.
Why does the moth fly straight to certain death? We assume that the spider exudes an odour similar to the female moth. Quite logical, but is it true?
These spiders and others who do not weave food-catching webs have large well-developed front legs, long reaching to be able to reach out and hold their prey.
This is the case with the Leaf Box Spider who bends a leaf in a shape that makes a box for him to hide with a landing platform for an unsuspecting insect to rest on. The long front legs are able to secure a meal for the hidden white spider. No assumptions here.
But now we come to the biggest puzzle of them all.
How does the leaf-curling spider curl up the leaf that he uses for a home? "He does not curl up a leaf – he uses a leaf that is already curled up", says one writer. "He uses a leaf already curled to his liking and raises it up from the ground." "But how?" we say. "By using the spiders own system of pulleys" says the writer. But no definition of this system is forthcoming.
So can we use any assumptions based on facts that we know to give us a reasonable explanation of how these mysterious system of pulleys works? Perhaps some of the facts we know about spider silk. Well, what do we know about spiders' silk? Spiders' silk is spun from spinnerets situated at the rear end of the spider and it is liquid when it leaves the spider and immediately turns to silk as it reaches the air. I saw this happen when a large spider I was watching in North Queensland, which had an enormous cartwheel web spun between trees in an orchard, captured a large beetle that blundered into the web, and became entangled in it. Perhaps worrying abut the damage the struggling beetle was doing to the net, the spider came prancing down the web and literally sprayed liquid silk over the beetle. The liquid spray immediately solidified on contact with the air and completely bound up the struggling beetle. The spider immediately left the victim in its death struggles as the drying silk shrunk and tightened around him. Unfortunately I could not stay to see how the spider went about making his meal.
Just a word about why I say that spider silk shrinks as it dries. I have watched spiders spin a line across a space, then, in a short time have felt it and was surprised to find how taut it was. I did not see the spider haul it in hand over hand to tighten it, so concluded that the silk must have shrunk as it dries. So therein lies the base on which I base my attempts to describe the system of pulleys used by the spider as claimed by said writer.
The spider, having spotted a suitable leaf, below her, drops a silk line with her on the end of it and fastens it onto the leaf. After waiting a while for her line to harden she would climb back up laying another line back up to her selected position. After waiting for the lines to dry and owing to shrinkage, she lifted the leaf off the ground a little, and so laying line after line she would raise the leaf slowly to her desired position possibly eating the slack lines as she went, for recycling to maintain supply.
Perhaps this is the description of the spiders' own system of pulleys.
Have you a better one?

Tang Tang Friends Group Excursion Report
Author: Rod Orr

On Sunday November 14, 1999, the Friends of Tang Tang met at the reserve and had their traditional annual picnic lunch (as you will probably recall, this tradition extends all the way back in time until 1996).

Environmental conditions at the reserve had been noticeably improved at the picnic meeting in 1998 following the suspension of grazing only shortly beforehand but, this year (1999), after another year of protection from grazing by farm animals, the condition of the grassland sections had improved to an amazing extent. The wallaby grasses had grown to their full potential and were approximately 0.5 m tall and growing as a dense 'crop'.
Many were still flowering profusely and other plants were heavy with seed - the native spear grasses were similarly impressive.

What about the smaller plants which had always been easily seen when we had visited the reserve in its former grazed-bare state, we wondered?

They were all still there, growing vigorously underneath and between the dense growth of native grasses. The basic structure of the grassland sections was intact - the native grassland was merely growing as we all should have expected it to be, after grazing pressure ceased.

Our surprise was caused by the rarity of this sight. Most of us had never seen a native grassland in very good condition before - it was truly amazing and is well worth visiting to see for yourself. The present condition of the grassland areas provides a dramatic vindication of our earlier recommendation that grazing should be suspended until the value of the remnant grassland could be properly appreciated.

What about the weed grasses which had been introduced into the reserve during its long history of grazing disturbance?

Careful searching showed that the weedy genera and species which had been seen here before and which infest most grassy remnants as problem grasses, were still here, but, in the regenerating grassland they were being swamped by the vigorous growth of spear grasses and wallaby grasses and were difficult to find. I hope that they will be even harder to find after another year of very heavy seeding of native grasses.

Could this be the solution for such an area, to continue its protection from grazing until the Brome grasses and other grassy weeds are competed out of existence, perhaps even to allow only grazing by native marsupials (Kangaroos often visit the reserve) and never again by cattle or sheep?

Following these observations, this possibility is worth much more serious consideration than we gave it at the last meeting of the Steering Committee for the Tang Tang Management Plan when we went along with the conventional wisdom of continuing to graze, but lightly (to maintain the 'structure' of the grassland).

I was anticipating considerable regrowth of native grasses but still expected that weed grasses would have been a major component of the grassy flora of the reserve. As a consequence of this observation that the weed grasses were struggling while the native grasses were thriving after the removal of grazing pressure, a realistic plan to suppress weed grasses in this reserve might be possible. We should take advantage of this strong competition by ungrazed native grasses which, presumably, are better adapted to growing conditions here than are the weed grass species. This would be a really worthwhile basis for further study to determine the year by year composition of quadrats sampling the ungrazed, grassy sections of the reserve and enable evaluation of the effectiveness of natural competition in suppressing weed grasses.

By contrast with the grassland, the swamp section of the reserve had an assortment of the expected weed grasses, thistles (mainly Spear Thistle), Ox-tongue, Prickly Lettuce and other common weeds of wetland reserves. Some of these weeds will need special efforts to control them (Bathurst Burr will need to be mapped and sprayed over many years to eradicate it from the reserve) and to prevent their spread to other parts of the reserve although we were still surprised that there was not a heavier cover of Spear Thistle after a couple of dry years in the bed of the 'lake'.

A positive observation was the presence of

wallaby grasses and spear grasses invading the marginal areas around the swamp section of the reserve, providing competition for the weed grasses and other weeds growing there. The lignum patches were in very good condition and the red gums looked very healthy with good leaf growth – many were also flowering heavily.

The recent sequence of dry years has been of great benefit to the health of these large and very old trees! Concerns about whether possums were present in such numbers that they were damaging the health of these trees would seem to be unfounded. Groundwater depth and duration of flooding are much more to 'blame' for the occasional periods
when tree health has obviously suffered a decline.

I've spoken to Rhonda Bullock (Parks Victoria Ranger) about these observations and comments and I've also suggested that we needed to separate the reunion aspects (for the Grylls family) from the Friends Group activities and interests.

We discussed the possibility of a joint Friends & Parks Victoria exercise focussed on controlling the Spear Thistle crop before it flowers and starts spreading new seeds, so that might be a good starting point for this fledgling Friends Group and give us all something useful to attempt.

I hope some of these observations are of interest and useful in bringing the Management Plan to its conclusion. If these observations are supported by the results of flora surveys in future years then we would not need to build any new fences at all to control grazing because we might never need to use farm animals as lawnmowers or weed-eaters if we can learn how to make better use of natural competition to suppress weed grasses.

What we all need urgently is a better appreciation of what a natural grassland remnant is really like when it is left alone rather than being continuously disturbed by attempts to 'manage' it. Tang Tang in its ungrazed state is well worth a visit so that you can begin to understand for yourself how well a natural grassland remnant can protect itself by out-competing introduced weed grasses.

Bendigo Field Naturalists' Club

This article was written with the help of several members of the BFNC Committee for "Environment Victoria' and will appear in their magazine this month. It might be of particular interest to members who have joined the Club recently.

In the heart of Box and Ironbark country, the Bendigo Field Naturalists Club have their work cut out for them, lobbying, researching and educating to ensure that these precious woodlands, and the many species they provide a home to, are protected.

Rod Orr is the current President of the Bendigo Field Naturalists. Rod has been involved with the Club for around 20 years but could still be considered a relatively recent member. The Bendigo Field Naturalists were formed back in 1945 by a small group of people with a keen interest in the flora and fauna of the local area. A few original members, now in their nineties, still make it along to meetings.

Rod states that "the Bendigo Field Naturalists were initially an interest group, documenting what they found in the local area. But in the last ten to fifteen years the Club has turned its attention more to conservation issues".

The City of Greater Bendigo is surrounded by a ring of forest, mainly Box and Ironbark woodlands and mostly of only State Forest status. These woodlands, except for the few small areas with some conservation status (One Tree Hill Regional Park; Flora & Fauna Reserves; Historic Areas) are under constant pressure from logging for poles, fence posts and firewood, from exploration and mining, and from urban pressures on the forest fringe.

What's more, not all of Bendigo's surrounding forested land is public land. Large areas of forested land on the urban fringe of Bendigo are privately owned. Most of this private forested land is not fenced off to indicate its very different status from State Forest and other reserves on public land. Much of this privately owned forested land on the urban fringe is being cleared incrementally for residential subdivision, putting further pressure on the remaining bush.

Rod explains that many people do not seem to appreciate the value of the Box-Ironbark woodlands surrounding urban Bendigo and they commonly misunderstand what appears to be a forest of poor quality with thin, crowded trees, many growing multi-stemmed from large stumps. "Virtually all of the Box-Ironbark forests around Bendigo were cleared during the gold mining era (mid to late 1800s). The woodlands you see around here look young and the trees are quite thin because they are all regrowth. Very few trees are older than 130 years and most of the larger specimens were continually harvested during forestry operations, so most trees in these regrowth forests have never been allowed to grow to anything like maturity. Very few Bendigo people have ever seen a really big old Box or Ironbark tree and they never will unless our forests receive much better protection."

The Bendigo Field Naturalists are working hard to change this situation.

They are involved in the current state government Environment Conservation Council inquiry into the use of Victoria's Box and Ironbark woodlands. As well as making several submissions to the Inquiry during its research period, they plan to make follow-up submissions on the soon-to-be-released Draft Recommendations.

The Bendigo Field Naturalists are lobbying hard to have the status of all local woodlands upgraded, some of them to National Parks (particularly the unique ring of Box-Ironbark forest surrounding the Bendigo urban area).

In the past, sustained campaigns by the Club have led to an improvement in the level of protection for a number of areas. These include the Whipstick State Park and adjoining Kamarooka State Park. Totalling over 125,000 hectares of woodland, these areas were recommended as State Parks by the LCC in 1981 - the Bendigo Field Naturalists' Club received a conservation award from the Minister for Conservation for its efforts in demonstrating the conservation values of the Whipstick and Kamarooka Public Lands.

The Club is aiming to change public perception of the Box and Ironbark woodlands. They run a range of community education activities including seminars, educational walks and wildflower displays (jointly with the Bendigo Native Plant Group) and publish books (listed below) and a monthly newsletter, the Whirrakee. All of these activities highlight the variety of flora and fauna in the woodlands and the threats they face.

An example of the success of these activities is the Possums in the Park Program. The Bendigo Field Naturalists run this educational walk annually in local parks, talking about how possums live and the threats they face. Last year over 250 people turned up.....this year they're planning to institute a limit.

In addition to all of these activities, the Club finds time and energy to monitor various species, many of them threatened or endangered. Members are surveying the endangered Swift Parrots and Grey Crowned Babblers as well as maintaining over 300 nest boxes for Sugar Gliders and Brush Tailed Phascogale and regular contributions are made to the Bird Atlas project. This information is passed on to the Department of Natural Resources and Environment as well as being used in submissions calling for greater protection of local forested areas.

All of this activity is very impressive for a small, regionally based group. Obviously those Box and Ironbark woodlands are well worth saving. Maybe you should check them out for yourself some time. Look out for Bendigo Field Naturalists' upcoming events in the Environment Victoria News 'What's On" section.

Bendigo Field Naturalists' Club Publications
(available from BFNC Inc. PO Box 396, Bendigo 3552 or Bendigo bookshops)

Eucalypts of the Bendigo District (1983, revised 1991)
Wildflowers of Bendigo (1988)
Birds of the Bendigo District (1991)
The Orchids of Bendigo (1995)

Australian Naturalists Network Get Together, 21-29th July 2000.

Below is a summary of information sent to the Club for people interested in attending the above event ((Information about this event was printed in Whirrakee late last year and all members who already expressed an interest should have been sent this information):

The interest and support shown by naturalists from all state and territories in the Australian Naturalists Network (ANN) 2000 Get Together at Alice Springs is most encouraging and appreciated. The Victorian Field Naturalists Club Association (VFNCA) committee organising the get together has received assistance from a number of people at Alice Springs, in particular Des Nelson, retired CSIRO Botanist, Sue Fraser, secretary and Robert Read. President of the Alice Springs Field Naturalists Club, and we are looking forward to sharing and informative and enjoyable time together from 21 to 29th July.

Segment 1 (optional)
3-day Western Safari
Tuesday 18, Wed 19 and Thursday 20th July.
Natural History of a remote part of the Western McDonnell Ranges

Segment 2 (Core Program)

Friday 21
Assemble at Olive Pink Botanical Gardens for a welcome by Alice Springs Field Naturalists Club

Saturday 22
Field Trip north of Alice Springs

Sunday 23
Field Trip to Rainbow Valley with Alice Springs FNC. Suitable for 2WD vehicles.

Monday 24 to Thursday 27
Our friends at Alice Springs have recommended many **excursions of geological, botanical, zoological and anthropological interest** at all points of the compass, including a visit to CSIRO Centre for Arid Zone Research and the Australian Centre for Remote Sensing (previously LANDSAT). Itineraries for these days and Sat am are not yet finalised.

Friday 28
Alice Springs Desert Park. General Tour, behind the scenes inspections and explanations together with alight meal, formalities and guest speaker at the Park Cafe during the evening. Group rate $39.-.
This is the only catered for meal on our program, all others are BYO.

Saturday 29
Alice Springs Water hole – Farewell picnic tea at Telegraph Station Historical Park.

Segment 3 (optional)
Hearts and Eastern McDonnell Ranges
6-day Safari
Monday 31 July - Sat 5 August

Dick Southcombe has sent a participant reply form for those member who want to attend the ANN get Together in Alice Springs in July. Please phone Sabine Wilkens (54432797) for a copy of the form.

Dick has requested that members who wish to attend return their participant reply forms by 17 March and that they also need to direct book their accommodation ASAP.
His phone number is 03 52433916 if you have any further queries.

Wildlife Rescue & Information Network Inc.
W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Natural Resources and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433

Bendigo Field Naturalists Club Inc.

Speaker Syllabus for General Meetings – Second Wednesday 7:30 pm

Date – 2000	Topic	Speaker
8 March	**Rabbits** Dr Coman is the author of the recently published book: Tooth and Nail: the Story of the Rabbit in Australia	**Brian Coman** P.O. Box 113 Strathfieldsaye, Vic 3551
12 April	**Aboriginal Plant Use and Land Management**	**Beth Gott** Dept of Biological Sciences, Monash University, Clayton, Vic 3168
10 May	**Environmental Law**	**Barry Phillips** School of Management, Technology and Environment, LaTrobe University, Bendigo, P.O. Box 199, Bendigo 3552
2 June	**Special Speaker for World Environment Day**	To be announced
14 June	**Mushrooms and Fungi**	**Robert Seviour** Dept of Biological Sciences LaTrobe University, Bendigo, P.O. Box 199, Bendigo, 3552
12 July	**Hollow Formation in Box-Ironbark forests**	**Les Vearing** Forester in Charge, Bendigo Forest Management Area, Dept of Natural Resources and Environment, Box 3100, Bendigo Mail Centre 3554
9 August	**Fallen Timber and Fauna Habitat**	**Lawrie Conole** 3 Gezireh Street, Pascoe Vale South Victoria 3044
13 September	**President's Address at Annual General Meeting**	**Rodney Orr**
11 October	**Soils of Bendigo**	**Nathalie Baxter** Land Evaluation Officer Centre foe Land Protection P.O. Box 3100, Bendigo Mail Centre. 3554
8 November		To be announced
13 December	**Christmas Dinner**	No speaker this month

Diary

The General, Bird Observers Group and Mammal Survey Group meetings are held at the Golden Square Senior Citizens Building, Old High Street, Golden Square, unless otherwise indicated.

General Meeting

Wednesday, March 8, 7:30pm
Dr Coman, the author of the recently published book *Tooth and Nail*, will be speaking about.....rabbits.

Wednesday, April 12, 7:30pm
Dr Beth Gott, Dept of Biological Sciences, Monash University, will talk about Aboriginal Plant Use and Land Management.

Garden News

The first Working Bee for stage 4 of the garden will be on Sunday, 21 May, 2000 starting at 9am.

The ground needs to be prepared and mulched for stage 4. Come and help if you can....these working bees always turn into pleasant events.
(See page 3 for more information)

Mammal Study Group Excursion

29 March 2000 – Wednesday evening:

The Mammal Study Group will be capturing bats at Lake Weeroona again this year as part of a long term study of bats in the Bendigo Region. The evening will start about 6:30pm with a BBQ tea (BYO everything) at the picnic pavilion nearest the RR track. Mist nets will be placed around the pavillion. a short talk on the biology of the bats and the results of the project will be given while waiting for the bats which will start to come out at 7:50pm. The bats will be weighed and measured before being released. Everyone is welcome, including children.

Please contact Bill Holsworth (Hon. Secretary of the Mammal Study Group) if you have any further questions Phone 5443 4063,
Email wholsworth@bigpond.com.au

Bird Observers Group

March 5 – new tree plantings on the Big Hill Range. We will have the chance to participate in monitoring the effects of ongoing revegetation on birds. Some plantations on the Big Hill Range are now 10 years old.

April 2– Elvyne Hogan's property at Shelbourne.

Atlassing Excursions are conducted on the first Sunday of every month. See page 5 for the year's program.
Meet 9am at the Clubroom, this is a half-day excursion.
Please contact Anne Bridley (ph. 54 493479) or Bev Culvenor (ph. 54 421983) if attending.

Other Events

VFNCA March Campout in 2000
Friday March 10 - Monday March 13
The Geelong Field Naturalists Club is inviting members to next year's annual campout.
See pages 12 and 13 of the December *Whirrakee* for further details.
Please contact Jane Cleary if you would like a copy of the map.
Although booking has closed for this camp, you might contact Dick Southcombe on 52433916 to see if late bookings are possible.

Woodland Protection and Firewood. Keeping Both
June 8 and 9, La Trobe University, Bendigo
see page 7 for details.

Supper

The usual arrangements for supper are as follows: members either bring a plate or pay $1 for supper. This small amount is used to reimburse members who purchase essential supper supplies.